

IN THE CLAIMS:

Please cancel claims 7, 11, and 14. **Please also amend** claims 1-6, 8-10, 12, 13, 15, and 16 and **add** new claims 17-35 as shown in the complete list of claims that is presented below.

1. (currently amended) A data transmitting and receiving system, comprising:

a data transmitting device; and

a data receiving device ~~being~~ connected to said data transmitting device; ~~and~~
device to receive a sequence of frames of data sent by said data transmitting device via
first transfers during a corresponding sequence of time bands, with one frame of the
sequence being transmitted via a first transfer during the corresponding time band,

~~wherein data is transmitted and received between said data transmitting device~~
~~and said data receiving device and wherein said data transmitting device is provided with~~
~~a first transmitting section used to periodically and sequentially transmit a plurality of~~
~~split data obtained by splitting data to be transmitted, to said data receiving device and~~
~~with a second transmitting section used to transmit said split data, when~~ which, if ~~said~~
~~data receiving device was unable to receive said split data sent from said first transmitting~~
~~section, to said data receiving device, a given frame, transmits parts of the given frame~~
again via second transfers during a period periods of time between transmitting time
~~bands in which said first transmitting section transmits said split data. the first transfers.~~

2. (currently amended) The data transmitting and receiving system according to Claim 1, wherein said ~~first transmitting section transfers said split data in accordance~~
~~with isochronous transfers~~ are conducted in accordance with specifications designated by

Universal Serial Bus (USB) standards, and said ~~second transmitting section transmits said split data that said data receiving device was unable to receive, in accordance with bulk~~ second transfers are conducted in accordance with specifications designated by said USB standards.

3. (currently amended) The data transmitting and receiving system according to Claim 2, wherein said ~~first~~ transmitting section, after having transmitted said ~~split data~~ given frame to said data receiving device in accordance with interrupt transfer specifications designated by said USB standards, ~~prior to said first transmitting section's transmission of split data existing subsequent to said split data,~~ makes an inquiry of said data receiving device as to whether said data receiving device was able to receive said ~~split data transmitted by said first transmitting section.~~ given frame, before transmitting parts of the frame again via said second transfers.

4. (currently amended) The data transmitting and receiving system according to Claim 3, wherein said data receiving device, in response to said inquiry from said ~~first~~ transmitting section as to whether said data receiving device was able to receive said given frame, ~~split data transmitted by said first transmitting section in said data transmitting device in accordance with interrupt transfer specifications,~~ notifies said ~~first~~ transmitting section as to whether said data receiving device was able to receive said ~~split data,~~ given frame in accordance with said interrupt transfer specifications.

5. (currently amended) The data transmitting and receiving system ~~according to Claim 4,~~ comprising:

a data transmitting device; and

a data receiving device connected to said data transmitting device,

wherein data is transmitted and received between said data transmitting device and said data receiving device,

wherein said data transmitting device is provided with a first transmitting section used to periodically and sequentially transmit a plurality of split data obtained by splitting data to be transmitted, to said data receiving device and with a second transmitting section used to transmit said split data, when said data receiving device was unable to receive said split data sent from said first transmitting section, to said data receiving device, during a period of time between transmitting time bands in which said first transmitting section transmits said split data,

wherein said first transmitting section transfers said split data in accordance with isochronous transfer specifications designated by Universal Serial Bus (USB) standards and said second transmitting section transmits said split data that said data receiving device was unable to receive, in accordance with bulk transfer specifications designated by said USB standards,

wherein said first transmitting section, after having transmitted said split data to said data receiving device in accordance with interrupt transfer specifications designated by said USB standards, prior to said first transmitting section's transmission of split data existing subsequent to said split data, makes an inquiry of said data receiving device as to

whether said data receiving device was able to receive said split data transmitted by said first transmitting section,

wherein said data receiving device, in response to said inquiry from said first transmitting section as to whether said data receiving device was able to receive said split data transmitted by said first transmitting section in said data transmitting device in accordance with interrupt transfer specifications, notifies said first transmitting section as to whether said data receiving device was able to receive said split data, in accordance with said interrupt transfer specifications, and

wherein said data transmitting device stores information about a location of split data to be stored that said data receiving device was unable to receive.

6. (currently amended) The data transmitting and receiving system according to Claim [[4,]] 5, wherein said second transmitting section, when said first transmitting section has received a notification that said data receiving device was unable to receive said split data, transmits, in accordance with said bulk transfer specifications, said split data that said data receiving device was unable to receive, to said data receiving device.

Claim 7 (cancelled).

8. (currently amended) ~~The~~ A data transmitting and receiving system ~~according to Claim 2, comprising:~~

a data transmitting device; and

a data receiving device being connected to said data transmitting device,

wherein data is transmitted and received between said data transmitting device and said data receiving device,

wherein said data transmitting device is provided with a first transmitting section used to periodically and sequentially transmit a plurality of split data obtained by splitting data to be transmitted, to said data receiving device and with a second transmitting section used to transmit said split data, when said data receiving device was unable to receive said split data sent from said first transmitting section, to said data receiving device, during a period of time between transmitting time bands in which said first transmitting section transmits said split data,

wherein said first transmitting section transfers said split data in accordance with isochronous transfer specifications designated by Universal Serial Bus (USB) standards and said second transmitting section transmits said split data that said data receiving device was unable to receive, in accordance with bulk transfer specifications designated by said USB standards, and

wherein said second transmitting section, when said data receiving device was unable to receive split data transmitted by said second transmitting section in accordance with said bulk transfer specifications, re-transmits said split data that said data receiving device was unable to receive, in accordance with said bulk transfer specifications.

9. (currently amended) ~~The~~ A data transmitting and receiving system ~~according to Claim 1,~~ comprising:

a data transmitting device; and

a data receiving device being connected to said data transmitting device;

wherein data is transmitted and received between said data transmitting device and said data receiving device and wherein said data transmitting device is provided with a first transmitting section used to periodically and sequentially transmit a plurality of split data obtained by splitting data to be transmitted, to said data receiving device and with a second transmitting section used to transmit said split data, when said data receiving device was unable to receive said split data sent from said first transmitting section, to said data receiving device, during a period of time between transmitting time bands in which said first transmitting section transmits said split data,

wherein said data receiving device stores information about a location of missed split data said data receiving device was unable to receive.

10. (currently amended) The data transmitting and receiving system according to Claim 1, wherein said data receiving device is a printing system and wherein ~~said first transmitting section and second transmitting section transmit split data produced by splitting~~ frames of data are printing data to be printed by said printing system ~~in a form of said split data.~~

Claim 11 (cancelled).

12. (currently amended) The data transmitting and receiving system, ~~according to Claim 11,~~ comprising:

a data transmitting device and a data receiving device ~~being~~ connected to said data transmitting device, wherein said data transmitting device ~~is provided with a~~

~~transmitting portion used to transmit~~ transmits frames of data to said data receiving device periodically via first transfers and ~~a receiving portion used to receive data from said data receiving device and wherein said transmitting portion has a first transmitting section to periodically transmit said split data and a second transmitting section to non-periodically transmit split data, out of said split data fed from said first transmitting section,~~ re-transmits data from frames which said data receiving device was unable to receive normally, the re-transmissions being conducted by second transfers.

13. (currently amended) The data transmitting and receiving system according to Claim 12, wherein said ~~second transmitting section performs said transmission of data to said data receiving device during a period of time~~ re-transmissions are conducted between ~~transmitting time bands in which said first transmitting section transmits said data,~~ the first transfers.

Claim 14 (cancelled).

15. (currently amended) The A data receiving device ~~according to Claim 14,~~ for use with a data transmitting device that transmits frames of data to said data receiving device periodically via first transfers and re-transmits data from frames which were not received normally via second transfers between said first transfers, said data receiving device comprising:

~~a transmitting portion used to transmit data to a data transmitting device and a receiving portion used to receive data from said data transmitting device and wherein said~~

~~receiving portion has a first receiving section to periodically receive said split data frames of data via said first transfers and a second receiving section to non-periodically receive split data, out of said split data fed from said data transmitting device, which said first receiving section was unable to receive normally. data from re-transmitted frames via said second transfers.~~

16. (currently amended) The data receiving device according to Claim 15, wherein said second receiving section performs said receiving of data from ~~said data transmitting device~~ re-transmitted frames during ~~a period~~ periods of time between ~~receiving time bands in which said first receiving section receives said data.~~ said first transfers.

17. (new) The data receiving device according to Claim 15, wherein said first transfers are isochronous transfers and said second transfers are bulk transfers.

18. (new) The data transmitting and receiving system according to Claim 1, wherein said time bands are isochronous time bands, said first transfers are isochronous transfers, and said second transfers are bulk transfers.

19. (new) The data transmitting and receiving system according to Claim 1, wherein said data transmitting device splits said given frame into a plurality of portions that are transmitted via a plurality of second transfers.

20. (new) The data transmitting and receiving system according to Claim 1, wherein said data receiving device is a printer, said data are printing data, and said data transmitting device splits said printing data into said frames.

21. (new) The data transmitting and receiving system according to Claim 12, wherein said first transfers are isochronous transfers and said second transfers are bulk transfers.

22. (new) The data transmitting and receiving system according to Claim 12, wherein said frames which said data receiving device was unable to receive normally are split into a plurality of portions by said data transmitting device and transmitted to said data receiving device during a plurality of second transfers.

23. (new) The data transmitting and receiving system according to Claim 12, wherein said data receiving device is a printer, said data are printing data, and said data transmitting device splits said printing data into said frames.

24. (new) A data transmitting and receiving system, comprising:

a data receiving device; and

a data transmitting device coupled to the data receiving device, the data transmitting device including a data storing section having a sending data area that stores a sequence of frames of data to be transmitted to the data receiving device, a first table identifying the frames, and a second table identifying frames reported by the data receiving device as not having been properly received, the data transmitting device

additionally including a buffer section that periodically transfers the data of frames identified in the first table during first transfers and that non-periodically transfers the data of frames identified in the second table during second transfers, the non-periodic transfers of data occurring between the periodic transfers of data.

25. (new) The system of claim 24, wherein each first transfer sends an entire frame of data to the data receiving device and wherein a frame of data identified in the second table is split, and sent to the data receiving device via a plurality of second transfers.

26. (new) The system of claim 24, wherein the first table identifies the frames to be transmitted via first transfers by head address and frame size, and the second table identifies the frames to be transmitted via second transfers by head address and frame size.

27. (new) The system of claim 24, wherein the first transfers are isochronous transfers conducted in accordance with Universal Serial Bus (USB) standards, and the second transfers are bulk transfers conducted in accordance with the USB standards.

28. (new) The system of claim 27, wherein the buffer section additionally sends an interrupt transfer in accordance with the USB standards after each isochronous transfer, the interrupt transfer requesting acknowledgement of receipt by the data receiving device.

29. (new) The system of claim 24, wherein the data receiving device comprises a storing section having a table with information about the frames reported by the data receiving device as not having been properly received.

30. (new) The system of claim 24, wherein the data receiving device is a printer.

31. (new) A data transmitting device for use with a data receiving device, said data transmitting device comprising:

a data storing section which includes a sending data area that stores a sequence of frames of data to be transmitted to the data receiving device, a first table identifying the frames, and a second table identifying frames reported by the data receiving device as not having been properly received; and

a buffer section that periodically transfers the data of frames identified in the first table during first transfers and that non-periodically transfers the data of frames identified in the second table during second transfers, the non-periodic transfers of data occurring between the periodic transfers of data.

32. (new) The data transmitting device of claim 31, wherein each first transfer sends an entire frame of data to the data receiving device and wherein a frame of data identified in the second table is split, and sent to the data receiving device via a plurality of second transfers.

33. (new) The data transmitting device of claim 31, wherein the first table identifies the frames to be transmitted via first transfers by head address and frame size, and the second table identifies the frames to be transmitted via second transfers by head address and frame size.

34. (new) The data transmitting device of claim 31, wherein the first transfers are isochronous transfers conducted in accordance with Universal Serial Bus (USB) standards, and the second transfers are bulk transfers conducted in accordance with the USB standards.

35. (new) The data transmitting device of claim 34, wherein the buffer section additionally sends an interrupt transfer in accordance with the USB standards after each isochronous transfer, the interrupt transfer requesting acknowledgement of receipt by the data receiving device.